FIG. 1

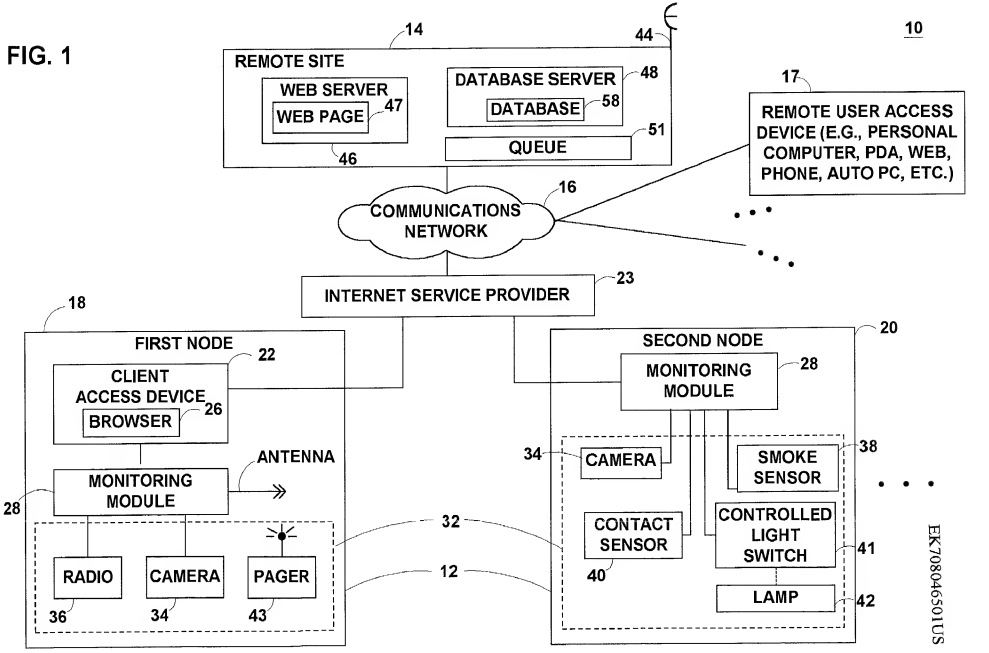
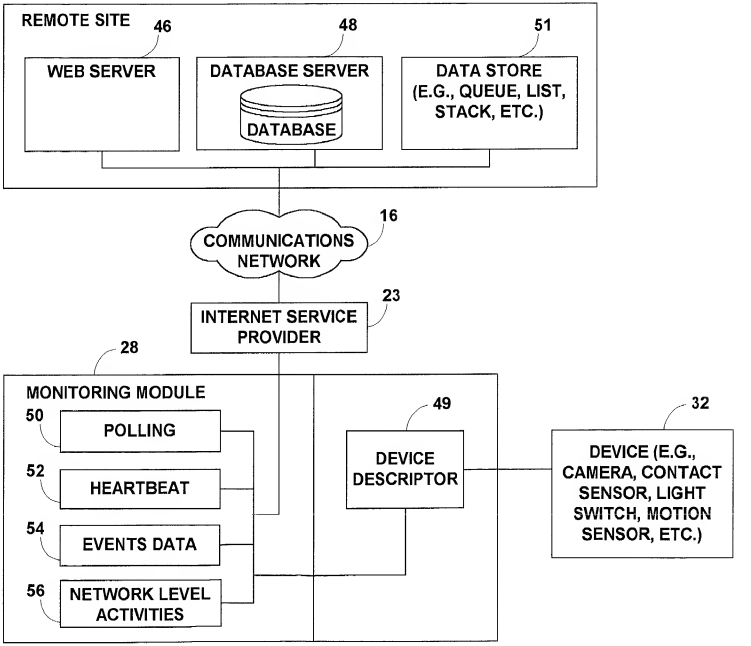

10
14
REMOTE SITE
44
WEB SERVER
WEB PAGE
47
46
DATABASE SERVER
48
DATABASE
58
QUEUE
51
17
REMOTE USER ACCESS DEVICE (E.G., PERSONAL COMPUTER, PDA, WEB, PHONE, AUTO PC, ETC.)
16
COMMUNICATIONS NETWORK
23
INTERNET SERVICE PROVIDER
18
FIRST NODE
22
CLIENT ACCESS DEVICE
BROWSER
26
ANTENNA
MONITORING MODULE
28
RADIO
36
CAMERA
34
PAGER
43
32
12
SECOND NODE
20
MONITORING MODULE
28
34
CAMERA
SMOKE SENSOR
38
CONTACT SENSOR
40
CONTROLLED LIGHT SWITCH
41
LAMP
42
EK708046501US

FIG. 2


REMOTE SITE
46
48
51
WEB SERVER
DATABASE SERVER
DATABASE
DATA STORE
(E.G., QUEUE, LIST,
STACK, ETC.)
16
COMMUNICATIONS
NETWORK
23
INTERNET SERVICE
PROVIDER
28
MONITORING MODULE
50
POLLING
52
HEARTBEAT
54
EVENTS DATA
56
NETWORK LEVEL
ACTIVITIES
49
DEVICE
DESCRIPTOR
32
DEVICE (E.G.,
CAMERA, CONTACT
SENSOR, LIGHT
SWITCH, MOTION
SENSOR, ETC.)

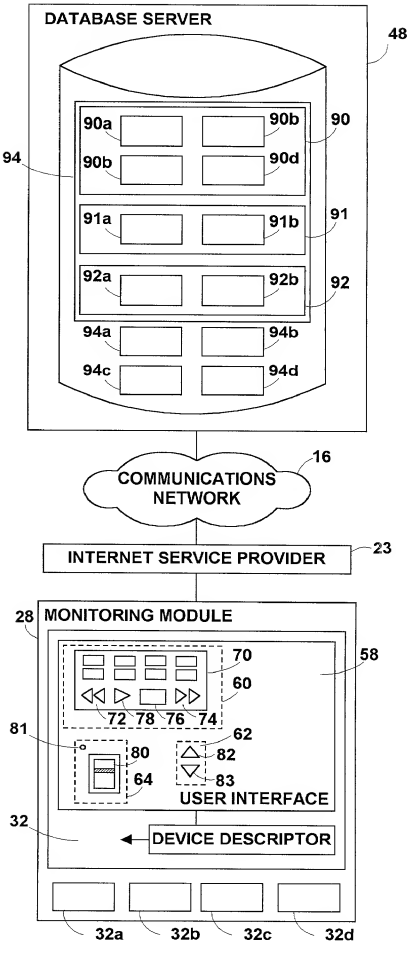

DATABASE SERVER
48
90a
90b
90
94
90b
90d
91a
91b
91
92a
92b
92
94a
94b
94c
94d
16
COMMUNICATIONS NETWORK
23
INTERNET SERVICE PROVIDER
28
MONITORING MODULE
70
58
60
72
78
76
74
81
62
80
82
64
83
USER INTERFACE
32
DEVICE DESCRIPTOR
32a
32b
32c
32d

FIG. 3

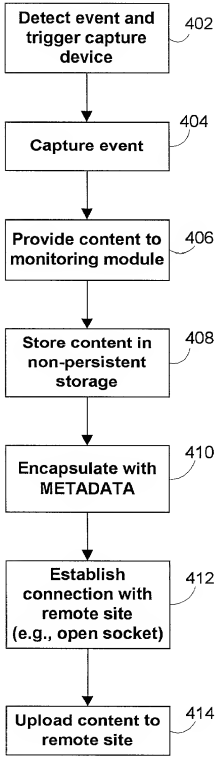

Detect event and trigger capture device
402
Capture event
404
Provide content to monitoring module
406
Store content in non-persistent storage
408
Encapsulate with METADATA
410
Establish connection with remote site (e.g., open socket)
412
Upload content to remote site
414

FIG. 4a

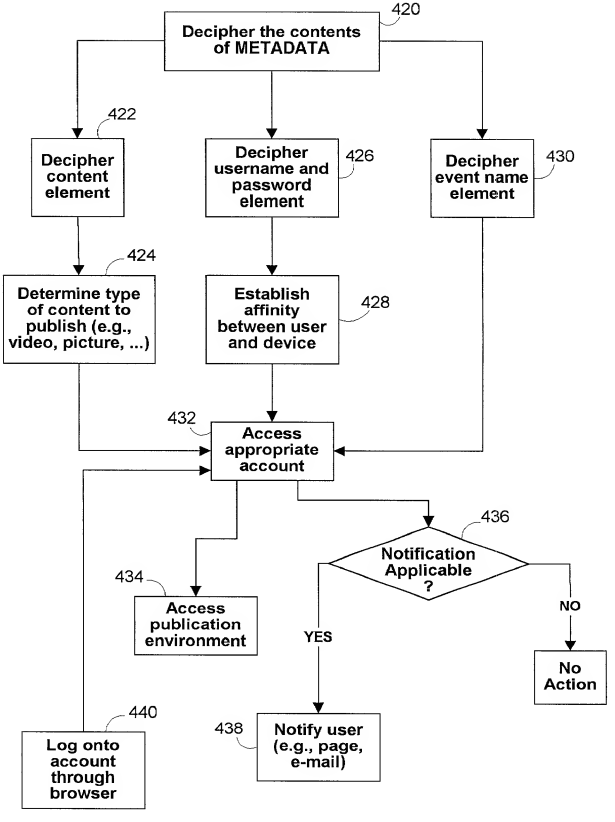
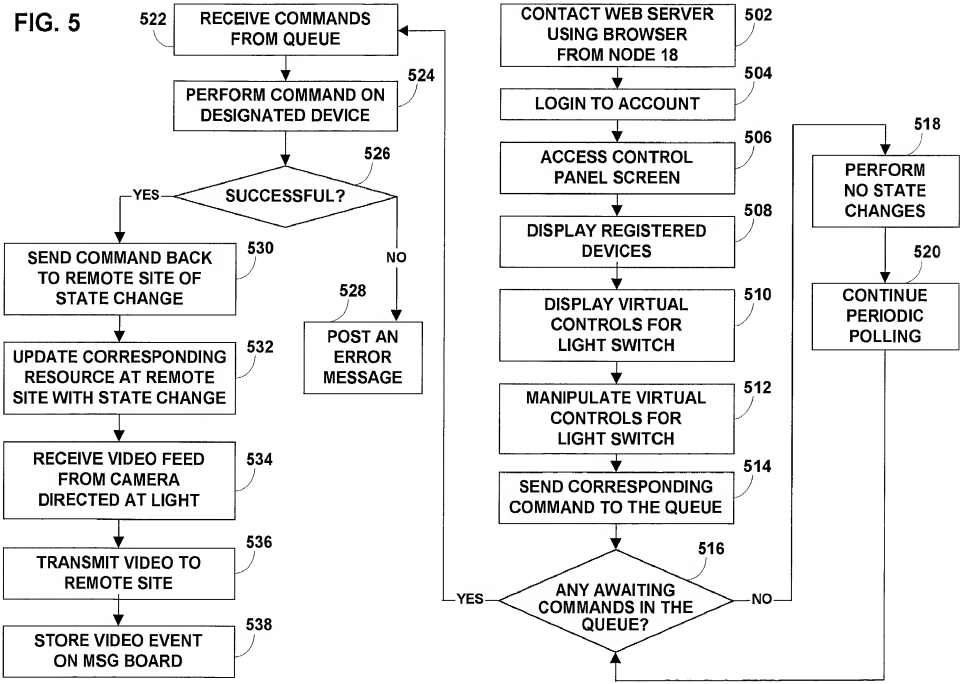

Decipher the contents of METADATA
420
Decipher content element
422
Decipher username and password element
426
Decipher event name element
430
Determine type of content to publish (e.g., video, picture, ...)
424
Establish affinity between user and device
428
Access appropriate account
432
Notification Applicable ?
436
YES
NO
Access publication environment
434
No Action
Notify user (e.g., page, e-mail)
438
Log onto account through browser
440

FIG. 4b

FIG. 5


522
RECEIVE COMMANDS FROM QUEUE
524
PERFORM COMMAND ON DESIGNATED DEVICE
526
SUCCESSFUL?
YES
NO
530
SEND COMMAND BACK TO REMOTE SITE OF STATE CHANGE
528
POST AN ERROR MESSAGE
532
UPDATE CORRESPONDING RESOURCE AT REMOTE SITE WITH STATE CHANGE
534
RECEIVE VIDEO FEED FROM CAMERA DIRECTED AT LIGHT
536
TRANSMIT VIDEO TO REMOTE SITE
538
STORE VIDEO EVENT ON MSG BOARD
502
CONTACT WEB SERVER USING BROWSER FROM NODE 18
504
LOGIN TO ACCOUNT
506
ACCESS CONTROL PANEL SCREEN
508
DISPLAY REGISTERED DEVICES
510
DISPLAY VIRTUAL CONTROLS FOR LIGHT SWITCH
512
MANIPULATE VIRTUAL CONTROLS FOR LIGHT SWITCH
514
SEND CORRESPONDING COMMAND TO THE QUEUE
516
ANY AWAITING COMMANDS IN THE QUEUE?
YES
NO
518
PERFORM NO STATE CHANGES
520
CONTINUE PERIODIC POLLING

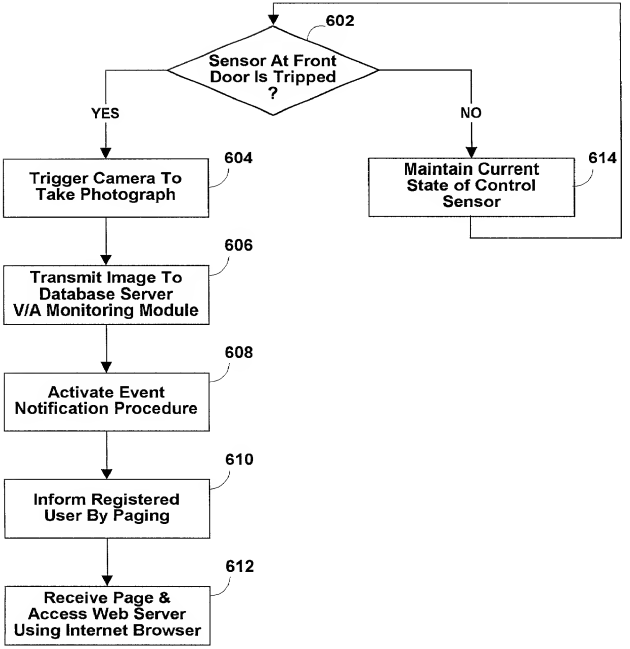

602
Sensor At Front Door Is Tripped ?
YES
NO
604
Trigger Camera To Take Photograph
606
Transmit Image To Database Server V/A Monitoring Module
608
Activate Event Notification Procedure
610
Inform Registered User By Paging
612
Receive Page & Access Web Server Using Internet Browser
614
Maintain Current State of Control Sensor

FIG. 6

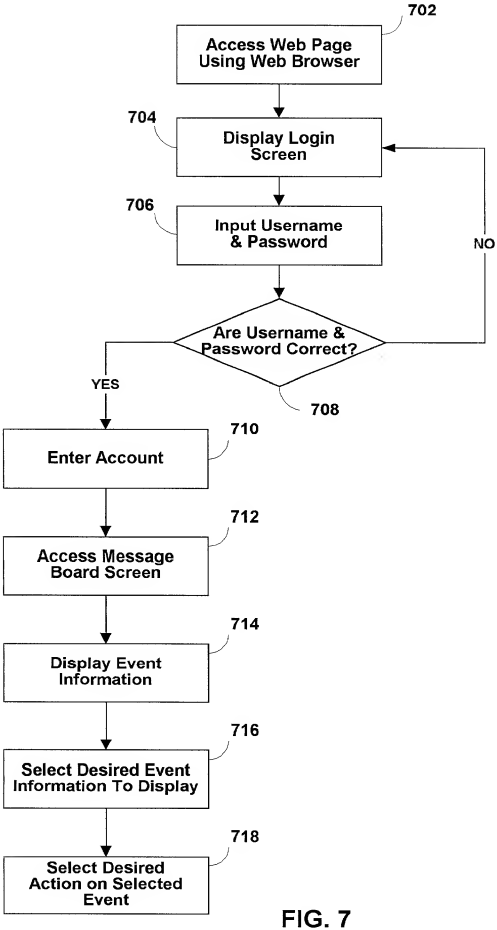

702
Access Web Page Using Web Browser
704
Display Login Screen
706
Input Username & Password
NO
Are Username & Password Correct?
708
YES
710
Enter Account
712
Access Message Board Screen
714
Display Event Information
716
Select Desired Event Information To Display
718
Select Desired Action on Selected Event

FIG. 7

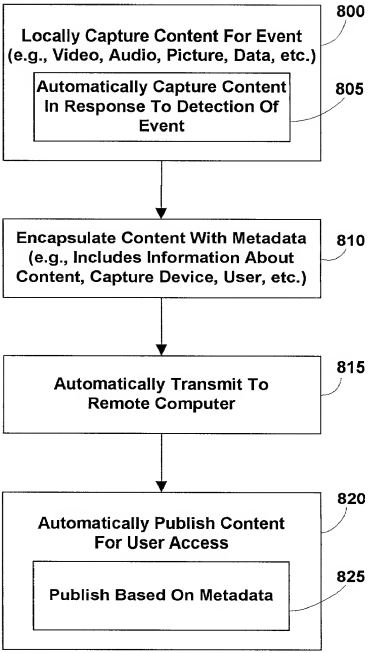

Locally Capture Content For Event (e.g., Video, Audio, Picture, Data, etc.)
800
Automatically Capture Content In Response To Detection Of Event
805
Encapsulate Content With Metadata (e.g., Includes Information About Content, Capture Device, User, etc.)
810
Automatically Transmit To Remote Computer
815
Automatically Publish Content For User Access
820
Publish Based On Metadata
825

FIG. 8

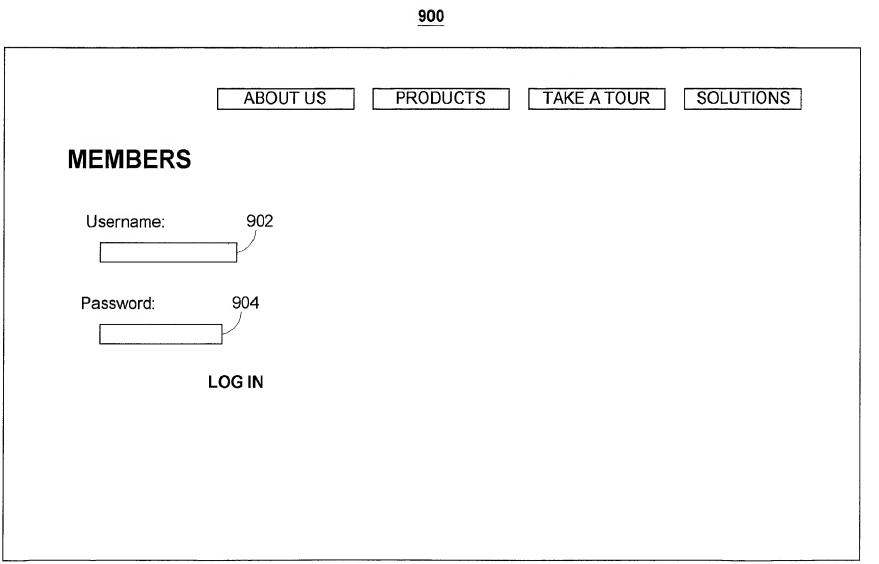

900
ABOUT US
PRODUCTS
TAKE A TOUR
SOLUTIONS
MEMBERS
Username:
902
Password:
904
LOG IN

FIG. 9

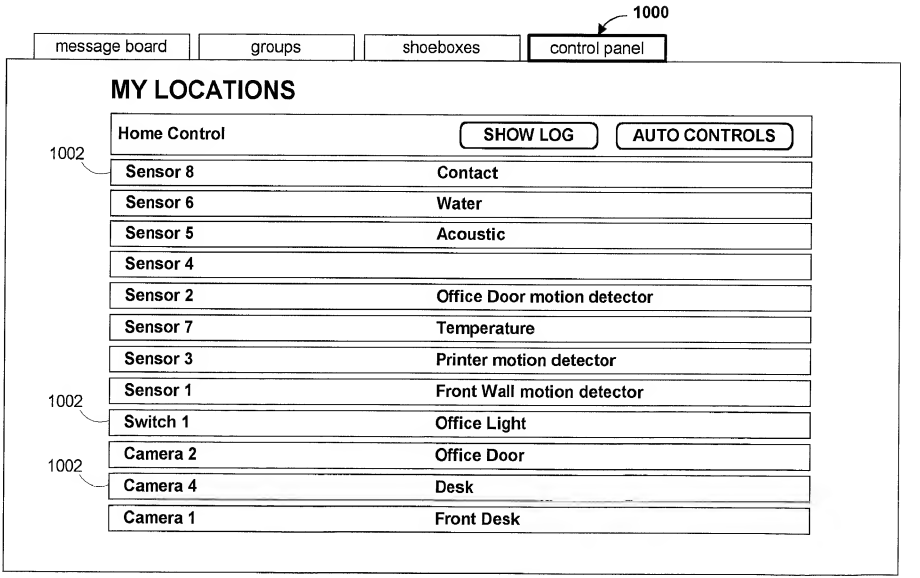

1000
message board
groups
shoeboxes
control panel
MY LOCATIONS
Home Control
SHOW LOG
AUTO CONTROLS
1002
Sensor 8
Contact
Sensor 6
Water
Sensor 5
Acoustic
Sensor 4
Sensor 2
Office Door motion detector
Sensor 7
Temperature
Sensor 3
Printer motion detector
Sensor 1
Front Wall motion detector
1002
Switch 1
Office Light
Camera 2
Office Door
1002
Camera 4
Desk
Camera 1
Front Desk

FIG. 10

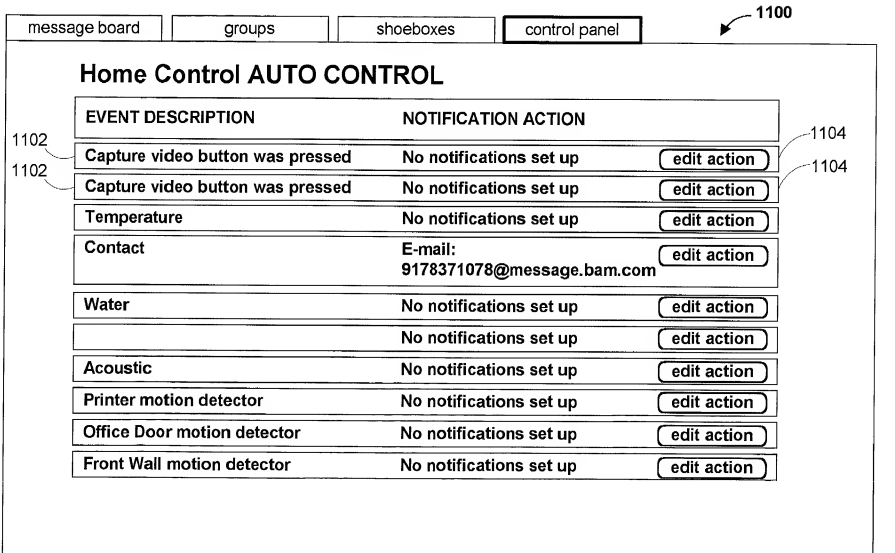

message board
groups
shoeboxes
control panel
1100
Home Control AUTO CONTROL
EVENT DESCRIPTION
NOTIFICATION ACTION
1102
1102
1104
1104
Capture video button was pressed
No notifications set up
edit action
Capture video button was pressed
No notifications set up
edit action
Temperature
No notifications set up
edit action
Contact
E-mail:
9178371078@message.bam.com
edit action
Water
No notifications set up
edit action
No notifications set up
edit action
Acoustic
No notifications set up
edit action
Printer motion detector
No notifications set up
edit action
Office Door motion detector
No notifications set up
edit action
Front Wall motion detector
No notifications set up
edit action

FIG. 11

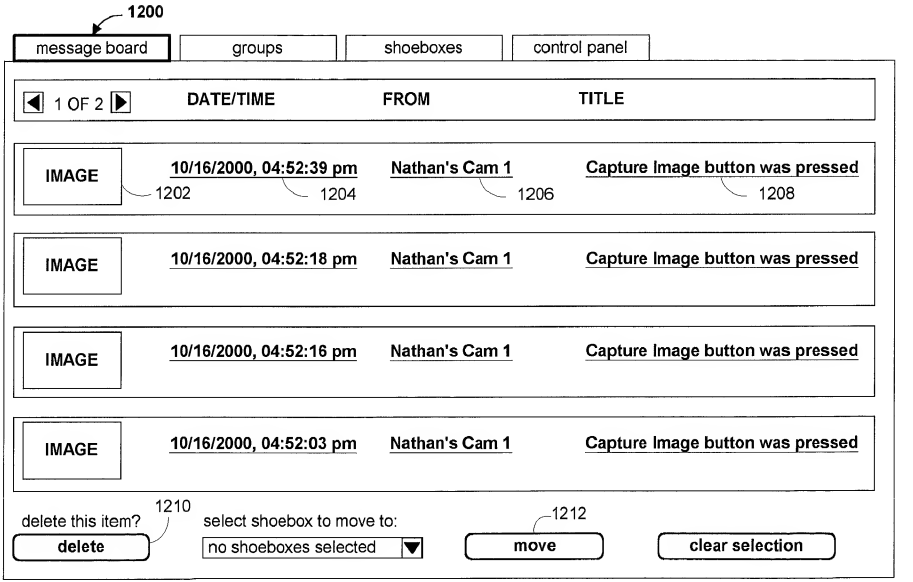

1200
message board
groups
shoeboxes
control panel
1 OF 2
DATE/TIME
FROM
TITLE
IMAGE
10/16/2000, 04:52:39 pm
Nathan's Cam 1
Capture Image button was pressed
1202
1204
1206
1208
IMAGE
10/16/2000, 04:52:18 pm
Nathan's Cam 1
Capture Image button was pressed
IMAGE
10/16/2000, 04:52:16 pm
Nathan's Cam 1
Capture Image button was pressed
IMAGE
10/16/2000, 04:52:03 pm
Nathan's Cam 1
Capture Image button was pressed
delete this item?
1210
delete
select shoebox to move to:
no shoeboxes selected
1212
move
clear selection

FIG. 12

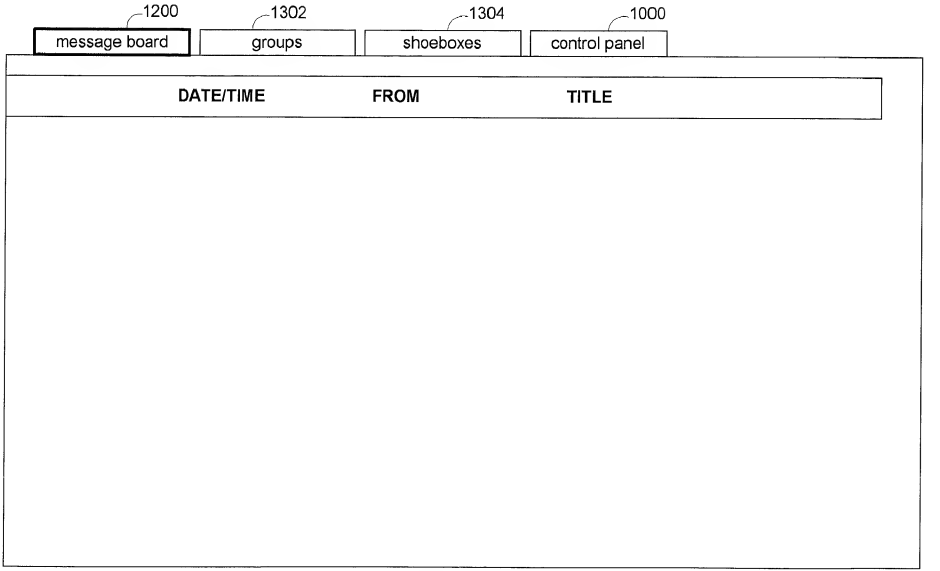

1200
1302
1304
1000
message board
groups
shoeboxes
control panel
DATE/TIME
FROM
TITLE

FIG. 13

Patent Application Publication

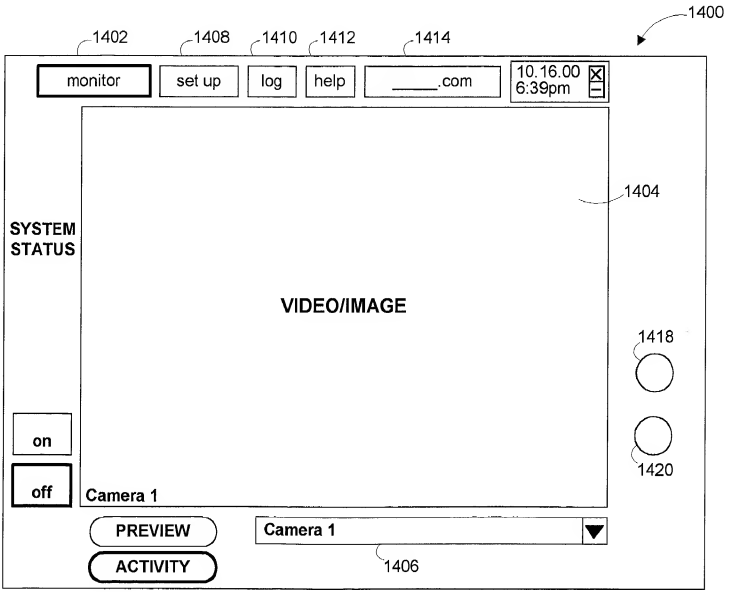


FIG. 14

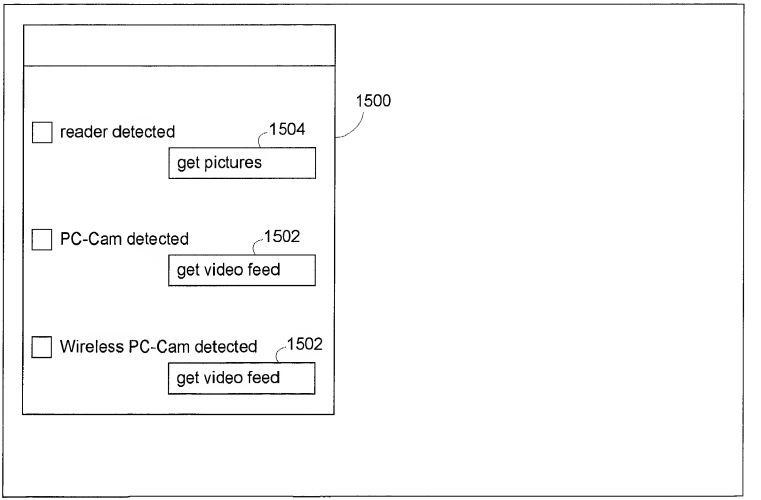

1500
reader detected
1504
get pictures
PC-Cam detected
1502
get video feed
Wireless PC-Cam detected
1502
get video feed

FIG. 15

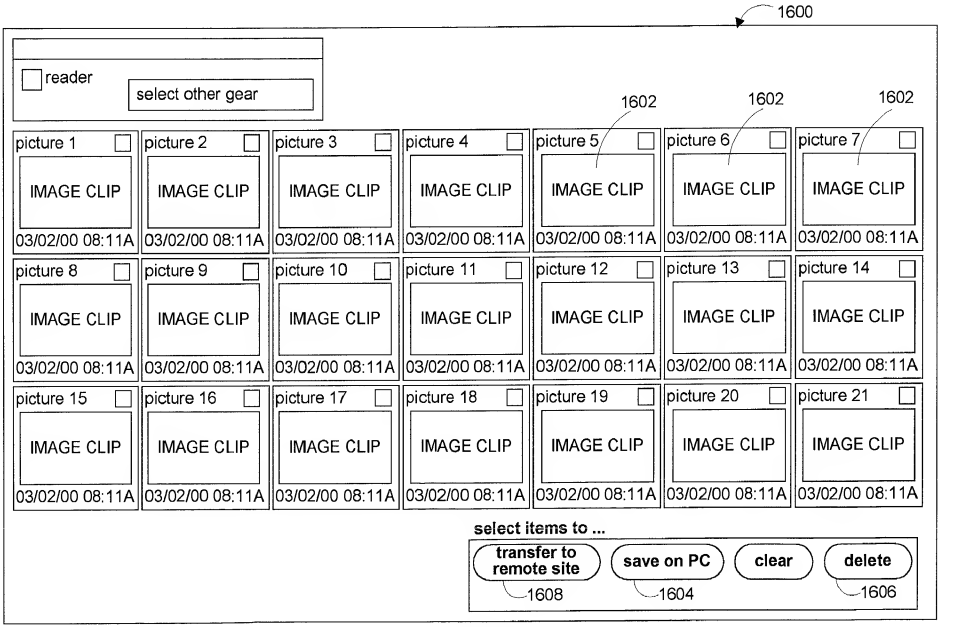

1600
reader
select other gear
1602
1602
1602
picture 1
IMAGE CLIP
03/02/00 08:11A
picture 2
IMAGE CLIP
03/02/00 08:11A
picture 3
IMAGE CLIP
03/02/00 08:11A
picture 4
IMAGE CLIP
03/02/00 08:11A
picture 5
IMAGE CLIP
03/02/00 08:11A
picture 6
IMAGE CLIP
03/02/00 08:11A
picture 7
IMAGE CLIP
03/02/00 08:11A
picture 8
IMAGE CLIP
03/02/00 08:11A
picture 9
IMAGE CLIP
03/02/00 08:11A
picture 10
IMAGE CLIP
03/02/00 08:11A
picture 11
IMAGE CLIP
03/02/00 08:11A
picture 12
IMAGE CLIP
03/02/00 08:11A
picture 13
IMAGE CLIP
03/02/00 08:11A
picture 14
IMAGE CLIP
03/02/00 08:11A
picture 15
IMAGE CLIP
03/02/00 08:11A
picture 16
IMAGE CLIP
03/02/00 08:11A
picture 17
IMAGE CLIP
03/02/00 08:11A
picture 18
IMAGE CLIP
03/02/00 08:11A
picture 19
IMAGE CLIP
03/02/00 08:11A
picture 20
IMAGE CLIP
03/02/00 08:11A
picture 21
IMAGE CLIP
03/02/00 08:11A
select items to ...
transfer to remote site
save on PC
clear
delete
1608
1604
1606

FIG. 16

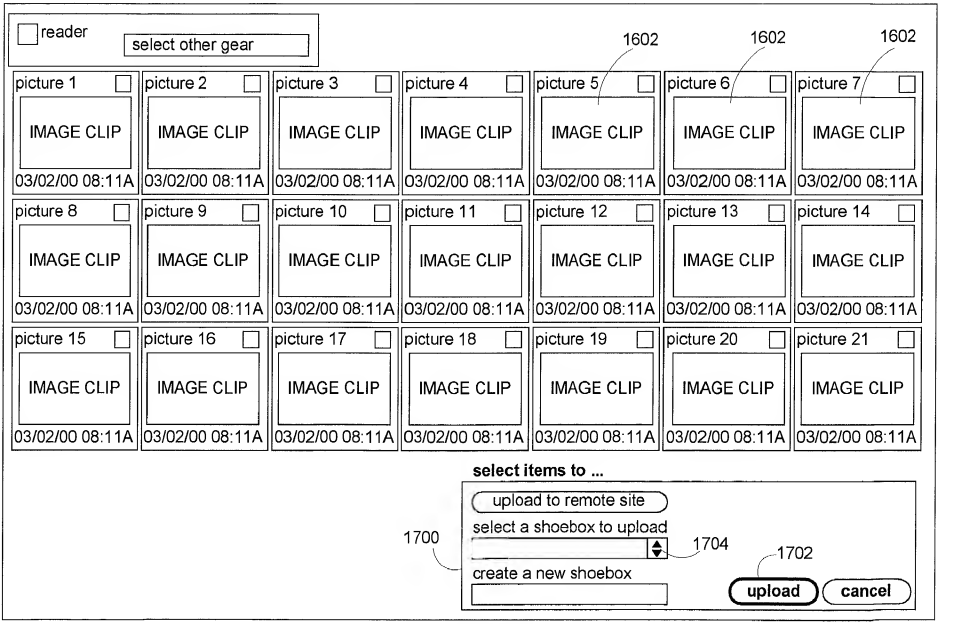

reader
select other gear
1602
1602
1602
picture 1
picture 2
picture 3
picture 4
picture 5
picture 6
picture 7
IMAGE CLIP
03/02/00 08:11A
picture 8
picture 9
picture 10
picture 11
picture 12
picture 13
picture 14
picture 15
picture 16
picture 17
picture 18
picture 19
picture 20
picture 21
select items to ...
upload to remote site
select a shoebox to upload
1700
1704
1702
create a new shoebox
upload
cancel

FIG. 17

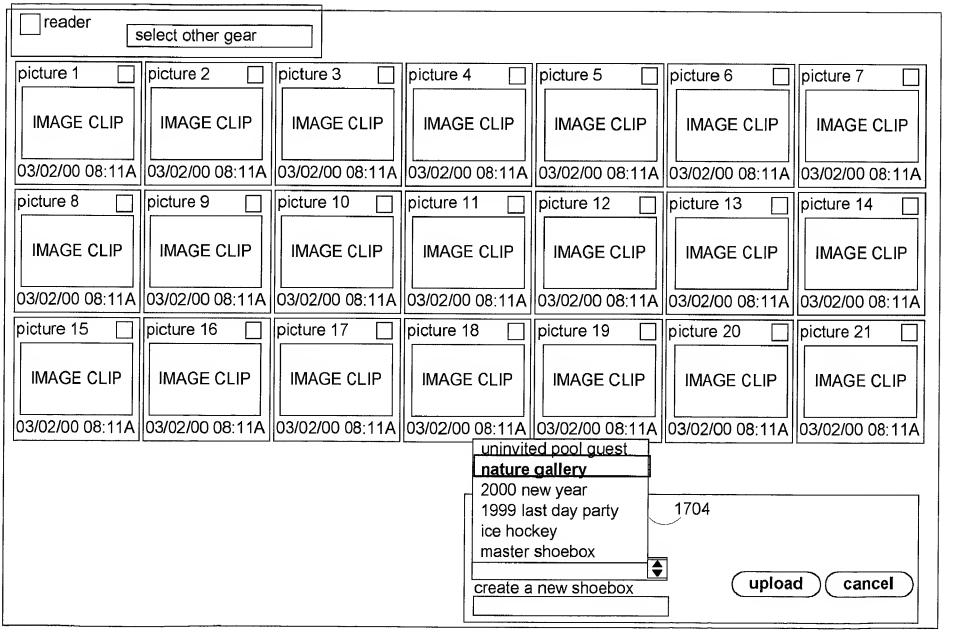

reader
select other gear
picture 1
picture 2
picture 3
picture 4
picture 5
picture 6
picture 7
picture 8
picture 9
picture 10
picture 11
picture 12
picture 13
picture 14
picture 15
picture 16
picture 17
picture 18
picture 19
picture 20
picture 21
IMAGE CLIP
03/02/00 08:11A
uninvited pool guest
nature gallery
2000 new year
1999 last day party
ice hockey
master shoebox
1704
create a new shoebox
upload
cancel

FIG. 18

Patent Application

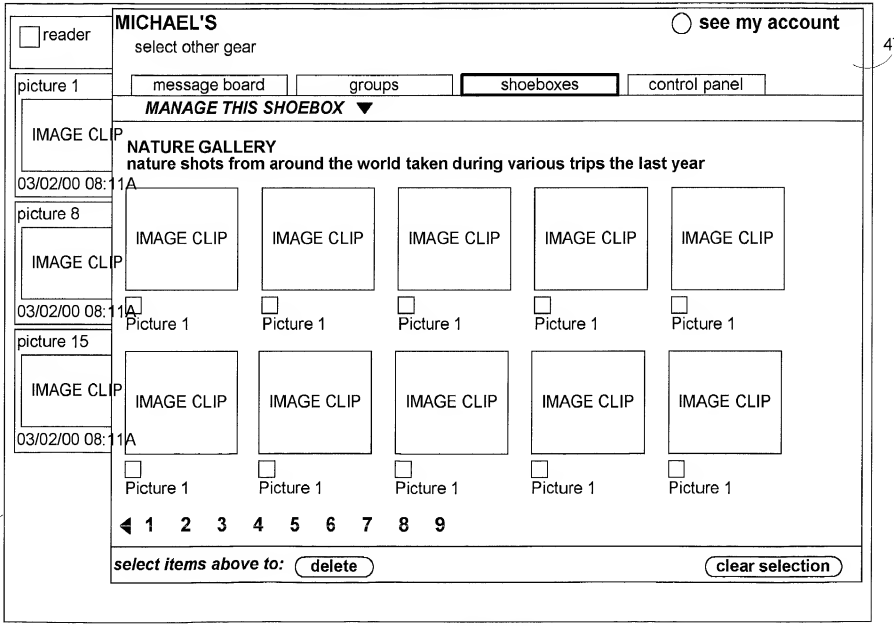


FIG. 19